

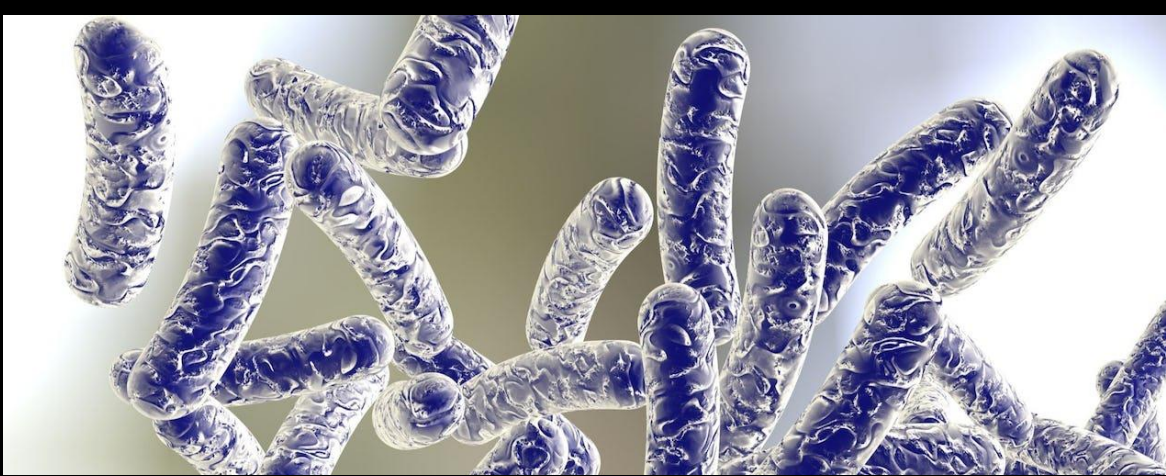
# Paris Session 2022



How predictable is (long term)  
RES/DER behaviour?

Study Committee C6  
Preferential Subject 2  
Question 2.8, on RES/DER simulation

Evert de Haan, the Netherlands



Anti-legionella programme may cause high simultaneous loads

Spread timing anti-legionella programme  
(pact with suppliers)



Mix E/G with hybrid HP based on (day-ahead) market prices

Limited risk: electric winter peak load still dominant  
(max E contribution below 0°C)

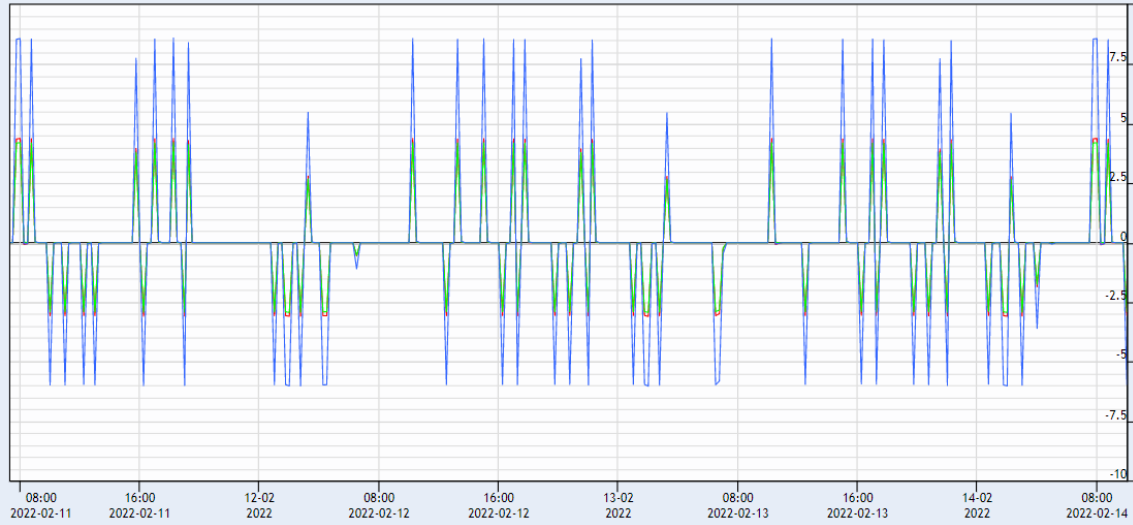


Uncertain impact of all-electric heat pumps in existing buildings:  
will the insulation be improved?

Frequent analysis of impact of installed heat pumps  
(Installatiemonitor)

Energy storage (incl. EV)

### Three days of load data (FCR, flywheel)



Peaks may be significantly higher than PTU averages;  
protection may trip

Any ideas?

FCR

FRR

Imbalance

Business case stacking differs,  
and with it the load/generation profile

Arbitrage

Congestion  
management

...

Short term (FCR):  
Profile alternating between +100% and -100% each 15 mins

Long term:  
More predictable profile due to FCR market saturation?